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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,380	02/05/2002	Masato Yoshikawa	Q67634	4529

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EXAMINER

MOORE, KARLA A

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/066,380

Applicant(s)

YOSHIKAWA ET AL.

Examiner

Karla Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 13 objected to because of the following informalities: Claim 13 recites the phrase "said fiber depositors". Examiner is not completely clear what this phrase is referring to. The claim has been treated assuming Applicant is referring to the depositors as recited in claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,196,100 to Goffetre et al.

4. Goffetre discloses an apparatus and method for film deposition equipped with a vacuum chamber (column 2, rows 46-49) capable of maintaining a vacuum therein, in which a film is deposited on surfaces of a substrate (30), which comprises a traveling means (motors, M1 and M2) for vertically traveling a continuous sheet as the substrate; and a pair of film deposition means (40a and 40b); said film deposition means being vertically arranged (one above the other) and horizontally faced each other (column 3, rows 61-64); and said continuous sheet being traveled between a pair of the film deposition means.

5. With respect to claim 2, film deposition sources in said film deposition means are a pair of magnetron sputtering cathodes (column 2, rows 28-31).

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6. With respect to claims 3-4, the courts have ruled that inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims. In re Young, 75 F. 2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

7. With respect to claims 5 and 11, the target material for said cathodes may be cobalt, copper, zinc, titanium, silver, tin, or an alloy thereof (column 1, rows 26-31).

8. With respect to claims 6 and 12, Goffetre et al. further teach the apparatus and the process using a gas for the film deposition, wherein the gas is an inert gas (for example argon), or a gas mixture of the inert gas and one or more kinds selected from the group consisting of oxygen-containing gas, nitrogen-containing gas and carbon-containing gas (column 3, rows 45-52).

9. Additionally, with respect to claim 6, the courts have ruled that expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining the patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goffetre et al. as applied to claims 1-6, 8 and 11-12 above, and in view of U.S. Patent No. 5,198,033 to Kelley et al.

12. Goffetre et al. disclose the invention substantially as claimed and as described above.

13. However, Goffetre et al. fail to teach the apparatus capable of supplying a specific tension range to a substrate to be processed.

14. Kelley et al. teach that the tension applied to a substrate to be processed is determined empirically since the degree of topography modification varies with material and other reaction parameters (column 5, rows 1-10).

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15. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have empirically determined the appropriate tension range for a substrate to be processed based on properties of the substrate and other process parameters as taught by Kelley et al.

16. With respect to the specific material of the substrate and the weight of the substrate, as stated above, the courts have ruled that inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims. In re Young, 75 F. 2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

17. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goffetre et al. as applied to claims 1-6, 8 and 11-12 above, and in view of WO 98/434469 to Vanbutsele et al.

18. Goffetre et al. disclose the invention substantially as claimed and as described above.

19. However, Goffetre et al. fail to teach the continuous sheet is a non-woven fabric having a mass of 5 to 300 g/m<sup>2</sup>, wherein the non-woven fabric is formed of organic fibers.

20. Vanbutsele et al. teach the use of a screen comprising non-woven fabric formed of organic fibers (for example, polyamide) having a mass of 5 to 300 g/m<sup>2</sup> and a metal coating covering the non-woven fabric for the purpose of creating a screen with the elasticity necessary for handling and at the same time providing sufficient protection against electromagnetic interference (abstract).

21. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have used the deposition method of Goffetre et al. with a non-woven fabric such as polyamide having a mass of 5 to 300g/m<sup>2</sup> in order to produce a screen with the elasticity necessary for handling and capable providing sufficient protection against electromagnetic interference as taught by Vanbutsele et al.

22. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goffetre et al. as applied to claims 1-6, 8 and 11-12 above, and in view of U.S. Patent No. 4,437,324 to Sando et al.

23. Goffetre et al. discloses the invention substantially as claimed and as described above.

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24. However, Goffetre et al. fails to teach the apparatus comprising pretreatment electrodes provided upstream of said depositors.

25. Sando et al. teach the use of a plurality of electrodes (all of which, except the last pair, can be considered pretreatment electrodes). The electrodes are provided for the purpose of reactivating a gas while a substrate is traveling through the zig-zag passages. The construction leads to an elevated treating efficiency (column 3, rows 8-14).

26. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided pretreatment electrodes in Goffetre et al. on order to elevate the treatment efficiency as taught by Sando et al.

#### ***Response to Arguments***

27. Applicant's arguments filed 7/29/03, with respect to the horizontal configuration of the depositors and Goffetre et al. has been fully considered but they are not persuasive. It would have been obvious to one of ordinary skill in the art that the depositors could be placed "horizontally facing each other" or in an offset position without departing from the scope of the invention. The courts have ruled that mere rearrangement of parts which does not modify the operation of a device is prima facie obvious. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

28. Additionally, at column 3, rows 59-34, which was not present in the copy of the reference supplied in the IDS filed 8/8/02, Goffetre et al. teaches this to be true.

29. With respect to claims 3 and 4, Applicant's arguments filed 7/29/03, have been fully considered but they are not persuasive

30. In response to applicant's arguments, the recitation "a system" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). The specific substrate

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worked upon by the apparatus is related to an intended use of the apparatus. The addition of the words "a system" does not change the fact that the substrate is an item worked upon by the apparatus.

31. Further, the courts have ruled, inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims. In re Young, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

32. With respect to claim 5, Applicant's arguments, filed 07/29/03, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Goffetre et al. Though not pointed out in the previous rejection, Goffetre et al. does in fact teach the claimed target material.

33. Applicant's arguments filed 07/29/03, with respect to claim 6, have been fully considered but they are not persuasive. While a target material may fairly be considered part of an apparatus, a specific type of gas supplied to an apparatus has not been found to be a part of an apparatus.

34. The courts have held that expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

35. Additionally, at column 3, rows 45-52, which was not present in the copy of the reference supplied in the IDS filed 8/8/02, Goffetre et al. teaches the use of a gas as claimed by Applicant.

36. Applicant's arguments filed 07/29/03, with respect to claim 7 have been fully considered but they are not persuasive. Applicant argues that Kelley fails to teach the recited range of tensions. However, as explained in the previous office action, Kelley is not relied upon for specifically teaching Applicant's claimed tension range, but for teaching that the tension used in an apparatus is based on the substrate worked upon. For this reason, the claimed tension should not be relied upon to patentably distinguish the claimed invention from the prior art. Kelley teaches that suitable tension ranges can readily be determined for given processing conditions, which provide acceptable and consistent treatment of a target substrate.

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37. As noted above, the courts have ruled that inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims. In re Young, 75 F. 2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 703.305.3142. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on 703.308.1633. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9310 for regular communications and 703.872.9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

km  
October 15, 2003

*primary Examiner*  
*AV 1763*  
*P. Hannonzadeh*